Claims

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A method for the production of phosphonic estermodified organosiloxanes of the general formula

 $(R_2 SiO_{2/2})_p (R_3 SiO_{1/2})_q [O_{1/2} H]_t [(O_{f/2} R^1_{3-f} SiCR^2_2 P(O) (OR^4)_2]_s \quad (I) ,$

in which

- is a hydrogen atom or a monovalent, optionally -CN-, -NCO-, NR^{5}_{2} -, -COOH-, -COOR 5 -, -halogen-, 10 -acryloyl-, -epoxy-, -SH-, -OH- or $-CONR^{5}_{2}$ substituted $Si-C-bonded\ C_1-C_{20}$ hydrocarbon radical or C₁-C₁₅ hydrocarbonoxy radical in which one or more nonadjacent methylene units in each case may be replaced by groups -O-, -CO-, -COO-, -OCO- or 15 -OCOO-, -S- or $-NR^5-$ and in which one or more nonadjacent methine units may be replaced by groups, -N=, -N=N- or -P=,
- R^1 is a hydrogen atom or a monovalent, optionally -CN-, -NCO-, -COOH-, $-COOR^5-$, -halogen-, 20 -acryloyl-, -SH-, -OH- or -CONR⁵₂- substituted Si-C-bonded C_1 - C_{20} hydrocarbon radical hydrocarbonoxy radical in which one or more nonadjacent methylene units in each case may be replaced by groups -0-, -CO-, -COO-, -OCO-, or 25 -OCOO-, -S-, or $-NR^5$ - and in which one or more nonadjacent methine units may be replaced by groups, -N=, -N=N- or -P=,
 - is hydrogen or an optionally -CN- or halogen- R^2 substituted C_1-C_{20} hydrocarbon radical,
 - \mathbb{R}^4 is hydrogen or an optionally -CN- or halogensubstituted $C_1 - C_{20}$ hydrocarbon radical substituted or unsubstituted polyalkylene oxides having 1 to 4000 carbon atoms,
- is hydrogen or an optionally -CN- or halogen-R⁵ 35 substituted C_1-C_{10} hydrocarbon radical,
 - is 0 or an integer of from 1 to 100 000, \mathbf{p}
 - is 0 or an integer of from 1 to 100 000, Œ

- f is the number 1 or 2 or 3,
- s is an integer which is at least 1 and
- t is 0 or an integer which is at least 1,

p+q being an integer which is at least 1,

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characterized in that

at least one silane of the formula

10 $[(R^3O)_fR^1_{3-f}SiCR^2_2P(O)(OR^4)_2]$

[III]

is reacted with at least one silicon compound of the general formula

15 $(R_2SiO_{2/2})_p (R_3SiO_{1/2})_q [O_{1/2}H]_m$

[VI]

where

- ${\bf R}^{\bf 3}$ is hydrogen or an optionally -CN- or halogen-atom-substituted C_1-C_{20} hydrocarbon radical, and
- 20 m is an integer 1 or 2,
 - R, R^{1} , R^{2} , R^{4} , p, q, f and s have the above definitions.
- 2. The method of claim 1, characterized in that the sum $\mathbf{p} + \mathbf{q}$ is an integer which is at least 2.
 - 3. The method of claim 1 or 2, characterized in that it is carried out in the presence of catalyst.
- 30 4. The method of one or more of claims 1 to 3, characterized in that it is carried out at temperatures of 0 to 200°C.
- 5. The method of one or more of claims 1 to 4, characterized in that it is carried out in an inert gas atmosphere.